

### **ABSTRACT**

A dual function indenter for use in a nanoindentation system is disclosed. The indenter of the present invention includes an indentation tip having a machined flat at its distal end forming a compression platen. A sharp imaging probe tip adjacent the machined flat extends parallel to the centerline axis of the indentation tip. The sharp imaging probe tip extends beyond the surface of the machined flat for *in situ* scanning/imaging of the sample surface.